

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P459000

Luminaire Tested: **GALN-SA5A-735-U-T3R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459000  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5A-735-U-T3R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16703 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3

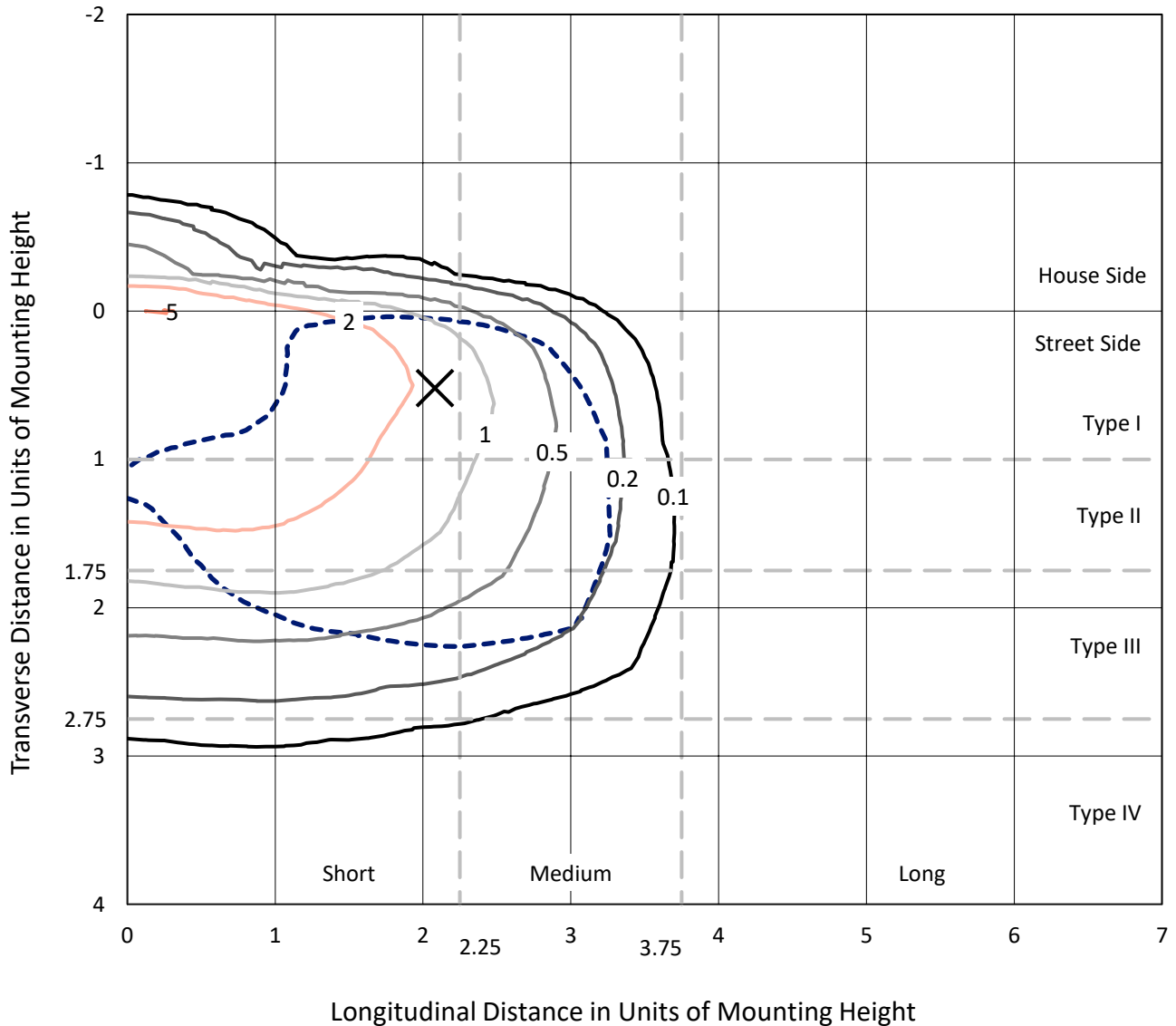
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P459000  
 CATALOG NUMBER: GALN-SA5A-735-U-T3R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

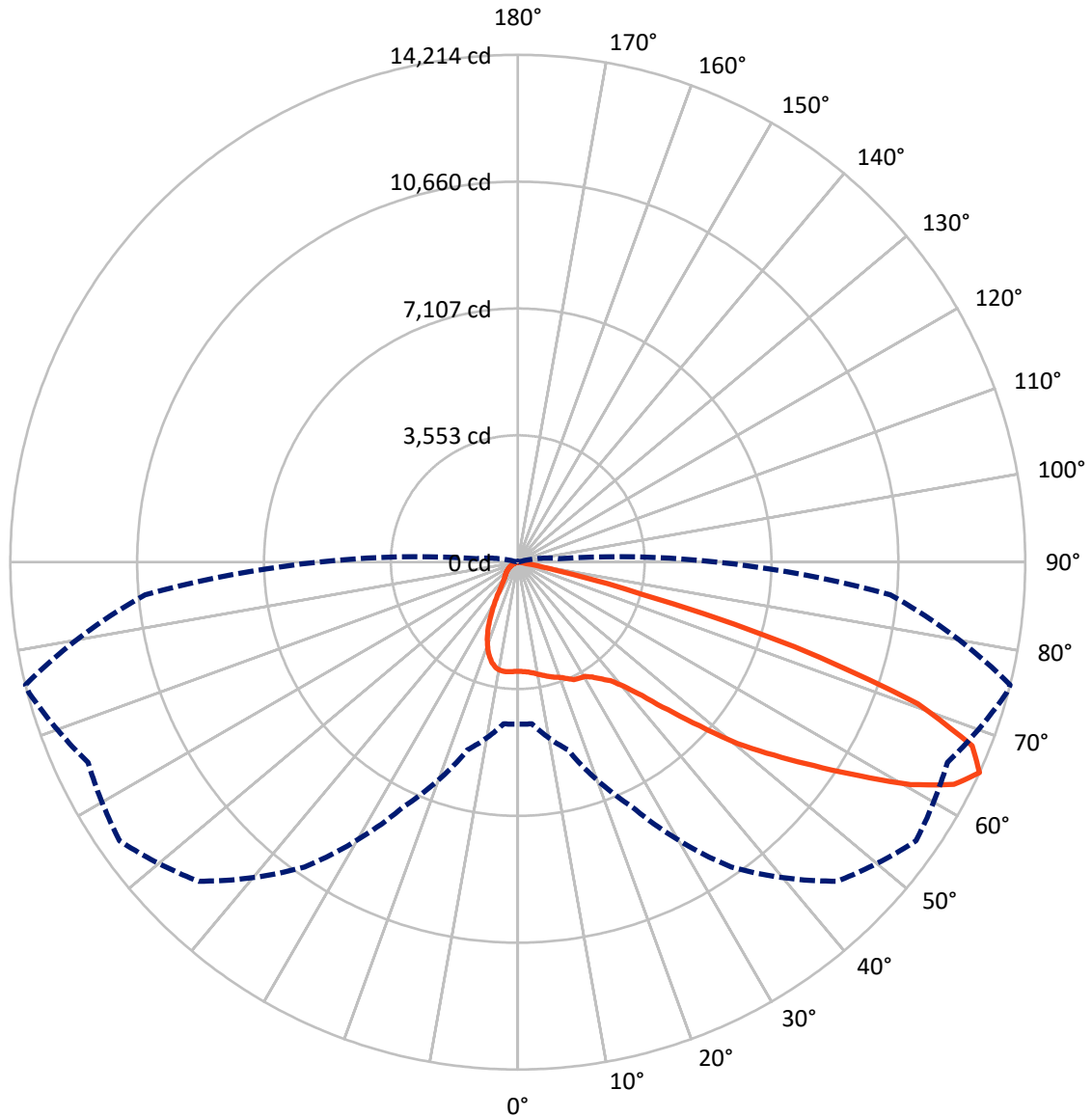
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc  
 Type III - Short - N/A

REPORT NUMBER: P459000  
CATALOG NUMBER: GALN-SA5A-735-U-T3R-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical



REPORT NUMBER: P459000  
 CATALOG NUMBER: GALN-SA5A-735-U-T3R-HSS

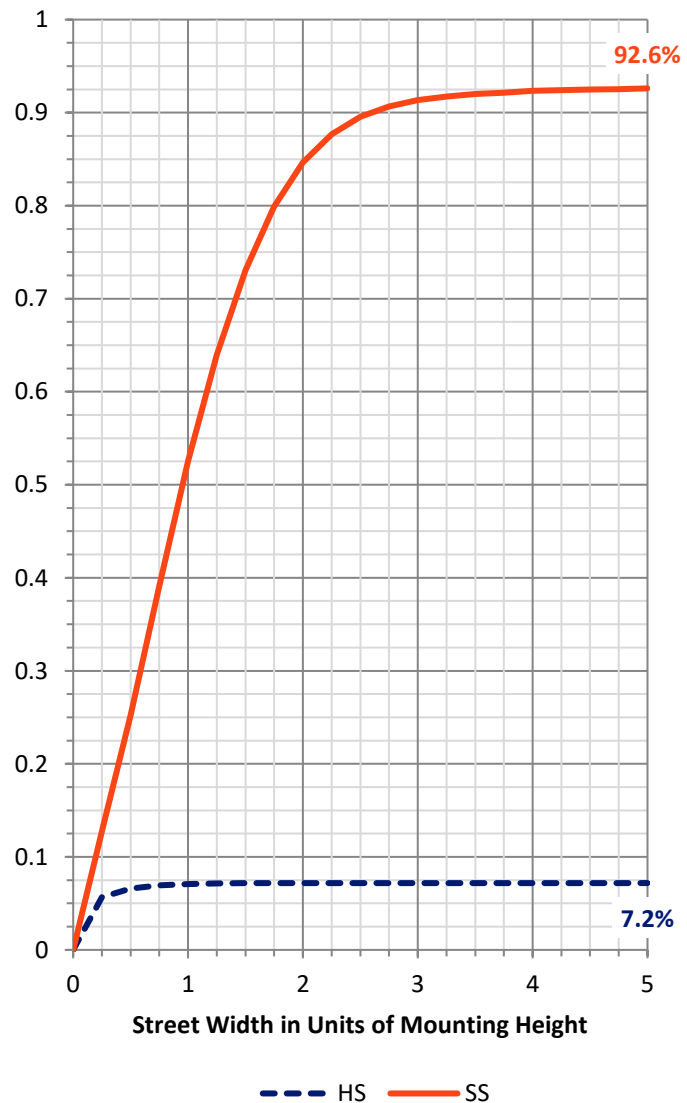
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1206.3	0.0	1206.3
	% Fixture	7.2	0.0	7.2
<b>Street Side</b>	Lumens	15496.7	0.0	15496.7
	% Fixture	92.8	0.0	92.8
<b>Total</b>	Lumens	16703.0	0.0	16703.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	251.7	1.5
10°-20°	560.4	3.4
20°-30°	903.1	5.4
30°-40°	1570.2	9.4
40°-50°	2594.7	15.5
50°-60°	4008.3	24.0
60°-70°	4894.8	29.3
70°-80°	1857.7	11.1
80°-90°	62.0	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	16703.0	100.0
0°-180°	16703.0	100.0



REPORT NUMBER: P459000

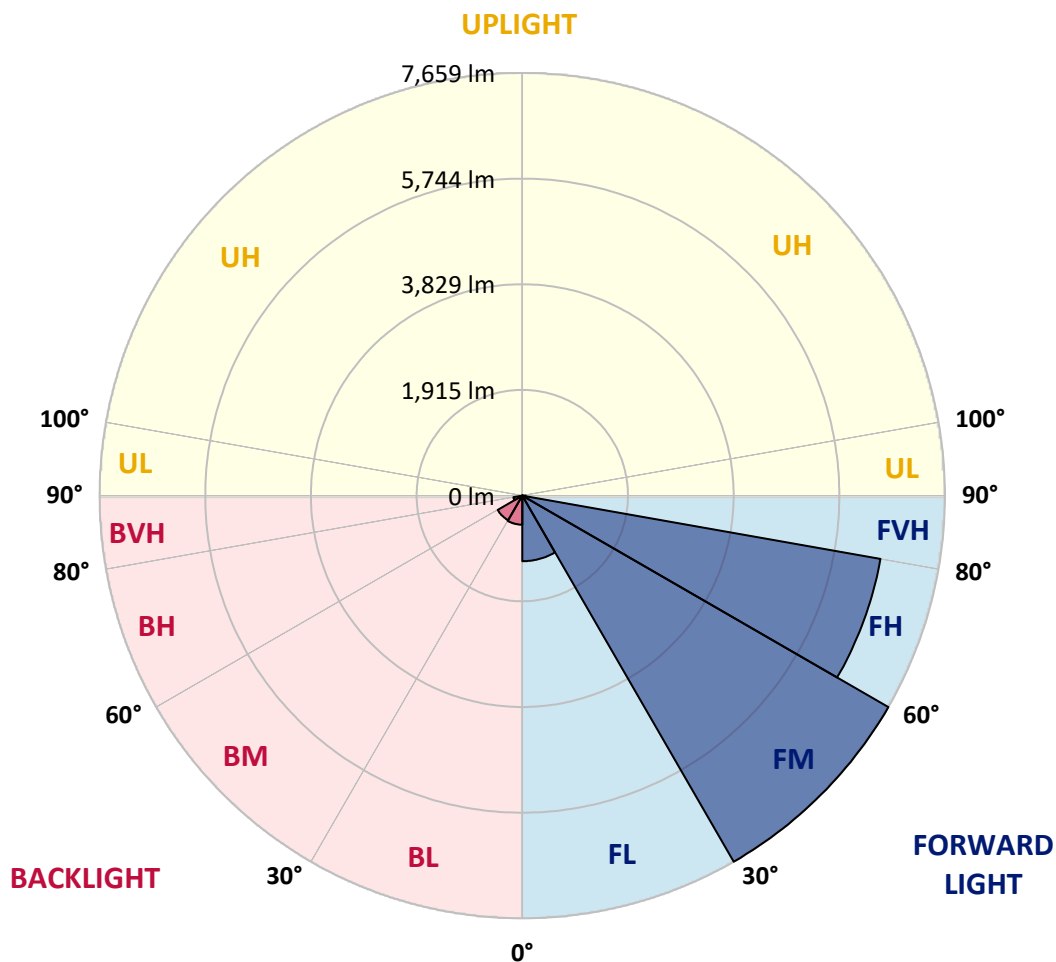
CATALOG NUMBER: GALN-SA5A-735-U-T3R-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1188.2	7.1			
FM	(30°-60°)	7658.6	45.9			
FH	(60°-80°)	6588.8	39.4			G3/7500
FVH	(80°-90°)	61.1	0.4			G1/100
BL	(0°-30°)	527.0	3.2	B2/1000		
BM	(30°-60°)	514.8	3.1	B1/1000		
BH	(60°-80°)	163.7	1.0	B1/500		G1/500
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Short





REPORT NUMBER: P459000

CATALOG NUMBER: GALN-SA5A-735-U-T3R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5
2.5°	2919.9	2921.1	2928.1	2945.8	2973.0	2995.4	3014.2	3044.9	3066.1	3068.5	3075.6
5°	2718.2	2704.1	2718.2	2764.2	2805.5	2868.0	2944.7	3021.3	3089.7	3094.4	3127.4
7.5°	2491.8	2503.6	2526.0	2573.2	2651.0	2746.5	2857.4	2994.2	3123.9	3135.7	3200.6
10°	2261.9	2287.8	2324.4	2396.3	2504.8	2628.6	2779.6	2975.3	3178.2	3194.7	3306.7
12.5°	2049.6	2061.4	2106.2	2202.9	2337.3	2511.9	2720.6	2964.7	3238.3	3258.3	3419.9
15°	1886.8	1902.2	1941.1	2028.4	2178.1	2402.2	2672.2	2961.2	3297.3	3325.6	3533.1
17.5°	1856.2	1865.6	1882.1	1941.1	2072.0	2314.9	2628.6	2960.0	3353.9	3388.1	3638.1
20°	1982.4	1974.1	1957.6	1951.7	2023.6	2247.7	2596.8	2969.4	3408.1	3447.0	3748.9
22.5°	2298.4	2309.0	2212.3	2097.9	2074.4	2237.1	2592.1	3014.2	3494.2	3540.2	3872.8
25°	2969.4	2888.1	2737.1	2463.5	2257.1	2302.0	2645.1	3120.4	3594.4	3645.2	3984.8
27.5°	3711.2	3686.4	3451.7	3001.3	2616.8	2438.7	2739.5	3201.7	3627.5	3679.4	4048.5
30°	4440.0	4469.5	4200.6	3702.9	3139.2	2692.3	2827.9	3232.4	3656.9	3711.2	4129.8
32.5°	5115.7	5151.1	4915.2	4422.3	3754.8	3131.0	2980.0	3351.5	3780.8	3836.2	4265.5
35°	5647.6	5652.3	5474.2	5081.5	4427.0	3664.0	3309.1	3560.2	3948.2	4013.1	4409.3
37.5°	6135.8	6128.7	5920.0	5581.5	4987.2	4193.5	3723.0	3800.8	4139.3	4206.5	4616.9
40°	6497.8	6502.5	6435.3	6116.9	5509.6	4682.9	4050.8	4026.1	4460.0	4565.0	4918.8
42.5°	6739.6	6783.2	6816.2	6654.7	6166.4	5285.5	4554.4	4508.4	5016.7	5103.9	5345.7
45°	6935.3	7013.2	7178.3	7170.0	6797.4	6024.9	5245.4	5151.1	5805.6	5898.8	5889.3
47.5°	7078.0	7157.0	7430.6	7595.7	7390.5	6741.9	6114.6	6033.2	6747.8	6849.3	6489.6
50°	7151.1	7245.5	7594.6	7914.1	7854.0	7433.0	7105.2	7109.9	7885.8	7983.7	7185.3
52.5°	6980.2	7102.8	7681.8	8257.3	8374.1	8094.6	8033.2	8188.9	8898.8	8982.6	7813.9
55°	6434.1	6588.6	7562.7	8549.8	8976.7	8875.3	9087.5	9324.6	10006.2	10060.4	8459.0
57.5°	6088.6	6252.5	7211.3	8798.6	9700.7	9856.4	10192.5	10365.9	11148.9	11286.9	9199.6
60°	5797.3	5925.9	6922.4	8851.7	10436.6	11056.9	11383.6	11562.8	12559.3	12648.9	10014.4
62.5°	5312.7	5460.1	6434.1	8481.4	10806.9	12018.0	12694.9	12614.7	13650.2	13712.7	10514.5
65°	4533.1	4546.1	5443.6	7550.9	10424.8	12641.9	13616.0	13279.9	14171.4	14213.8	10475.5
67.5°	3383.4	3508.4	4187.6	5935.3	8805.7	12108.8	13914.3	13297.5	13842.4	13724.4	9644.1
70°	2179.3	2274.8	2838.5	4115.7	6349.2	10105.2	12924.9	12386.0	12148.9	11887.1	7894.1
72.5°	1005.9	1128.6	1686.4	2351.5	3765.4	7198.3	10492.0	10062.8	8744.4	8098.1	5017.8
75°	438.7	469.4	832.6	1240.6	1765.4	3806.7	6917.7	6246.6	3949.4	3607.4	2008.3
77.5°	267.7	287.7	436.3	665.1	693.4	1450.5	3726.5	2725.3	1220.6	1076.7	544.8
80°	181.6	204.0	317.2	347.9	237.0	404.5	1398.6	727.6	246.5	235.9	116.7
82.5°	88.4	112.0	234.7	194.6	102.6	129.7	406.9	155.7	71.9	67.2	41.3
85°	13.0	22.4	132.1	127.4	46.0	30.7	71.9	38.9	24.8	23.6	18.9
87.5°	0.0	0.0	44.8	20.0	4.7	4.7	8.3	8.3	9.4	8.3	9.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P459000  
 CATALOG NUMBER: GALN-SA5A-735-U-T3R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5	3055.5
2.5°	3079.1	3085.0	3062.6	3030.7	2996.5	2962.3	2914.0	2870.4	2844.4	2859.8	2822.0
5°	3134.5	3129.8	3070.8	2974.1	2845.6	2691.1	2537.8	2406.9	2364.5	2300.8	2293.7
7.5°	3211.2	3198.2	3073.2	2851.5	2561.4	2271.3	1988.3	1800.8	1693.4	1602.6	1605.0
10°	3318.5	3280.8	3046.1	2635.7	2158.1	1720.6	1359.7	1112.1	1004.7	970.5	943.4
12.5°	3429.3	3356.2	2970.6	2344.4	1680.5	1175.7	826.7	675.7	609.7	588.5	586.1
15°	3528.4	3412.8	2838.5	1994.2	1221.7	751.2	563.7	514.2	505.9	507.1	505.9
17.5°	3626.3	3457.6	2655.7	1622.7	830.2	538.9	484.7	472.9	476.4	481.1	480.0
20°	3707.7	3467.1	2422.2	1238.2	587.3	472.9	455.2	452.8	456.4	459.9	459.9
22.5°	3796.1	3474.2	2145.1	857.3	480.0	439.9	430.4	430.4	435.2	439.9	441.1
25°	3862.1	3435.2	1813.7	615.6	423.4	408.0	403.3	404.5	409.2	411.6	410.4
27.5°	3872.8	3325.6	1462.3	471.7	384.4	369.1	364.4	369.1	363.2	366.8	364.4
30°	3882.2	3186.4	1106.2	397.4	349.1	325.5	318.4	311.3	306.6	300.7	299.5
32.5°	3911.7	3022.5	807.8	357.3	316.0	290.1	273.6	253.5	238.2	233.5	232.3
35°	3924.6	2825.6	593.2	325.5	286.6	258.3	228.8	200.5	178.1	169.8	175.7
37.5°	3974.2	2634.5	459.9	301.9	260.6	225.2	187.5	152.1	130.9	126.2	128.5
40°	4075.6	2427.0	385.6	281.8	238.2	194.6	148.6	114.4	100.2	95.5	94.3
42.5°	4238.3	2220.6	343.2	263.0	215.8	163.9	116.7	89.6	77.8	74.3	74.3
45°	4436.4	2022.5	313.7	242.9	192.2	132.1	92.0	71.9	64.9	62.5	62.5
47.5°	4697.1	1849.1	288.9	222.9	166.3	105.0	74.3	62.5	57.8	59.0	60.1
50°	4961.2	1720.6	261.8	200.5	136.8	86.1	63.7	55.4	54.2	55.4	55.4
52.5°	5160.5	1645.1	225.2	169.8	107.3	71.9	56.6	51.9	50.7	48.4	48.4
55°	5429.4	1628.6	179.3	138.0	84.9	60.1	50.7	47.2	43.6	41.3	40.1
57.5°	5774.9	1647.5	138.0	107.3	66.0	49.5	44.8	38.9	34.2	29.5	29.5
60°	5989.6	1605.0	107.3	82.5	48.4	40.1	34.2	28.3	22.4	18.9	17.7
62.5°	5921.2	1425.7	84.9	61.3	34.2	29.5	22.4	18.9	13.0	9.4	8.3
65°	5568.6	1151.0	68.4	42.5	24.8	17.7	11.8	11.8	5.9	1.2	0.0
67.5°	4874.0	852.6	54.2	28.3	14.2	8.3	5.9	3.5	0.0	0.0	0.0
70°	3967.1	615.6	42.5	17.7	8.3	5.9	2.4	1.2	0.0	0.0	0.0
72.5°	2518.9	352.6	33.0	10.6	5.9	2.4	0.0	0.0	0.0	0.0	0.0
75°	974.1	138.0	22.4	7.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	276.0	64.9	13.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	71.9	28.3	7.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.2	11.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.0	4.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)